## **Executive Summary**

riscal Year 2003

This report provides a review and evaluation of the Kentucky General Fund and Road Fund for fiscal year 2003 (FY03). General Fund receipts totaled \$6,783.5 million for the entire fiscal year, an increase from FY02 of 3.4 percent. This represents \$223.3 million more than reported receipts for FY02 and was \$75.7 million less than the revised consensus estimate for FY03. For the fourth quarter

of FY03, General Fund revenues dropped 1.2 percent, to \$1,783.8 million.

Road Fund receipts in FY03 totaled \$1,123.1 million, an

increase from FY02 of 0.4 percent. This is \$4.1 million more than reported for FY02, and \$2.0 million more than the consensus forecast for FY03.

The fourth quarter of FY03 saw the economy in a period of slow growth, with gross domestic product (GDP) expanding by only 1.5 percent annually. Personal income, a measure of spending power, was up by 3.2 percent annualized.

Nonagricultural employment fell by 0.3 percent, with a consequent increase in the unemployment rate to 6.1 percent of the labor force. Manufacturing continued to

Kentucky personal income was estimated to stand at \$106.9 billion annually in the fourth quarter, representing an increase of 2.5 percent from a year ago. Employment in the Commonwealth declined by 0.1 percent, losing 2,700 jobs. Once again,

experience the largest drop in employment.

manufacturing was the major loser, with a decline of 5.4 percent.

The weak economy was a factor in the General Fund decline in the fourth quarter. Performance by major tax type is detailed in Table 2.3 on page 11. Among the major accounts, the sales and use tax rose by just 0.2 percent, the individual income tax dropped by 2.9 percent, and

corporate income and license taxes rose by 12.8 percent. The coal severance tax continued its slide by 5.4 percent, property taxes declined by 4.6 percent, and the lottery fell by 2.4 percent. All other

taxes in the General Fund combined for a decline of 11.2 percent.

The Road Fund posted a small decrease in the fourth quarter of FY03, declining 0.9 percent with total revenues of \$298.2 million. Summary data on fourth-quarter Road Fund receipts appears in Table 2.4 on page 11. During the fourth quarter, motor fuels taxes rose 2.5 percent, and the motor vehicle usage tax was up 3.0 percent. The weight distance tax rose 0.9 percent. The remaining accounts in the Road Fund dropped by 14.8 percent, due primarily to declines in investment income and loss of certain toll revenues.

Economic data for the entire Fiscal Year 2003 indicate that GDP growth averaged 2.6 percent over the four quarters.

Nonagricultural employment in the U.S. declined by 0.4 percent. In Kentucky, personal income grew by 2.8 percent,

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compared to the 3.4 percent average U.S. growth. Kentucky employment added about 7,000 jobs during the fiscal year, rising by 0.4 percent.

The General Fund benefited from the coincidence of several "one-time" events in FY03 that boosted revenues significantly. Most notable of these was the tax amnesty program conducted by the Revenue Cabinet in August and September of 2002. Additional revenues were received during the fiscal year from unexpected sales tax, inheritance tax, and individual income tax payments. General Fund performance for FY03 is summarized in Table 2.6 on page 19.

Among the major accounts, the sales and use tax rose by 2.8 percent, and individual income taxes rose by 1.6 percent. The combined corporation income and license taxes were sharply up by 32.5 percent, whereas coal severance taxes fell by 11.5 percent. Property taxes increased by 0.4 percent, the lottery was up by 1.2 percent, and the "all other" category of remaining accounts grew by 5.1 percent.

As shown in Summary Table 1, the General Fund receipts fell short of the revised consensus forecast by \$75.7 million.

Among the major accounts, the corporate income and license taxes exceeded expectations, while sales and individual income taxes were disappointingly low.

The Road Fund receipts for FY03 are presented in detail in Table 2.8 on page 20. Most of the revenue comes from two sources: motor fuels taxes with \$438.6 million and the motor vehicle usage tax, which collected \$432.9 million.

Road Fund collections exceeded the official consensus forecast by \$2.0 million. (See Summary Table 2 on page 3.) Motor vehicle usage taxes and motor fuels taxes performed close to expectations. Investment income was higher than anticipated due to reimbursements from other accounts to the Road Fund during FY03.

The national economic outlook for the next three fiscal quarters is for GDP growth to average 2.9 percent. In Kentucky, personal income should grow by 2.7 percent annually compared to 4.1 percent growth nationally. Employment in the state should be virtually flat, with growth of only 0.1 percent.

The General Fund and Road Fund outlook for the next three fiscal quarters is for General Fund revenue to decrease by a rate of 3.9 percent over the first three quarters of FY04. The drop in revenues is primarily due to the one-time gains received in FY03 that boosted receipts during that fiscal year. Declines are expected to be experienced in the major accounts, with drops of 0.6 percent and 7.8 percent in the sales and use tax and the individual income tax, respectively. The interim forecast for the Road Fund is for an increase of 0.7 percent during the first three quarters of FY04 compared to the prior year. The rates of increase among the major taxes range from 13.3 percent for license and privilege taxes (exclusive of the weight distance tax) to a low of -65.6 percent for investment income.

The report contains an update of the Streamlined Sales Tax Project, the ongoing multistate project to modernize and simplify the sales tax structures. An agreement was reached among the participating states in November 2002, and Kentucky enacted conforming legislation in the 2003 General Assembly.

Another project involving GOEA is the Kentucky individual income tax microsimulation model. GOEA is developing an in-house model capable of simulating the revenue effects of changes to Kentucky's income tax laws. This new model is nearing completion, and will allow us greater flexibility and responsiveness to model impacts of proposed changes to the individual income tax. Future developmental work will consist of obtaining information that is missing from paper (as opposed to electronic) returns.

#### Summary Table 1 Summary of General Fund Comparison Actual FY03 vs. Official Estimate FY03 (millions of dollars)

	Actual	tual Official		rence
	Receipts	Estimate*	(\$)	(%)
Sales and Use	2,364.2	2,401.5	-37.3	-1.6
Indiv. Income	2,746.4	2,836.6	-90.2	-3.2
Corp. Inc. /Lic.	430.6	389.9	40.7	10.4
Coal Severance	141.7	143.7	-2.0	-1.4
Property	434.8	433.8	1.0	0.2
Lottery	171.0	168.6*	2.4	1.4
Other	494.8	485.1	9.6	2.0
TOTAL	6,783.5	6,859.2	-75.7	-1.1

<sup>\*</sup> Adjusted for 2003 Legislative Impact

#### Summary Table 2 Summary of Road Fund Comparison Actual FY03 vs. Official Estimate FY03 (millions of dollars)

	Actual Receipts	Official Estimate	Diffe	erence (%)
	•		( - ,	` ,
Motor Fuels				
& MF Usage	453.5	456.4	-2.9	-0.6
Motor Veh Usage	432.9	426.7	6.2	1.5
Weight Distance	76.9	78.3	-1.4	-1.8
Investment Inc	29.1	23.0	6.1	26.5
Other	130.7	136.7	-6.0	-4.4
TOTAL	1,123.1	1,121.1	2.0	0.2

The state's fiscal year, which begins on July 1, will be used as the time frame throughout this report, i.e., the fourth quarter of FY03 covers the April-June 2003 period.

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## I.

Fourth Quarter, Fiscal Year 2003

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## The Economy

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#### NATIONAL ECONOMY Fourth Quarter FY03

Real gross domestic product (GDP)<sup>1</sup> is estimated to have increased by just 1.5 percent in the April-to-June quarter on a seasonally adjusted annual rate. The growth for the fourth quarter is 2.2 percent when compared to the same quarter a year ago. This marks a deceleration compared to the robust 4.0 percent increase during the first quarter. Except for the first The final quarter, real output growth remained below two percent of FY03 during the year.

The rapid expansion of the 1990s

owed a great deal to strong boost to consumer demand. Consumption the expenditures account for about economy. two-thirds of real GDP. In the fourth quarter real consumption was up just 1.0 percent—the lowest in a decade. Even though interest rates were extremely low, the consumption of durable goods declined by 0.2 percent. The consumption of motor vehicles plummeted by 6.3 percent, though furniture and appliances were up 5.6 percent. Both of these categories are interest-rate sensitive. The seeming imbalance in their consumption patterns is due to the discontinuation of automobile incentives in the fourth quarter, and the strong housing market through most of the fiscal year. Nondurable-goods consumption was down 0.4 percent, primarily due to the 7.7 percent drop in real gasoline consumption as oil prices fell following the

<sup>1</sup>Real gross domestic product (GDP) is an inflationadjusted measure of the total output of goods and services produced in the United States.

toppling of the Hussein government in Iraq. Services constitute a little over onehalf of all consumption and about 35 percent of total GDP. The consumption of services increased by 1.9 percent in the fourth quarter compared to 0.7 percent in the previous quarter.

One of the positive features of the fourth quarter was the slight reduction in

> business inventory after increases in FY02. However, that was not enough to spur much investment. Business investment contracted by 1.1 percent compared to a 7.9 percent increase a year ago.

The Federal Reserve Board has been using monetary policy aggressively to jumpstart the economy. The targeted federal funds rate is currently 1.00 percent. Low interest rates were expected to spur both consumption and investment, and make the stock

market a more attractive proposition. However, none of the three outcomes came to pass during the fourth quarter.

Personal income, which is a measure of spending power, was \$9,199.1 billion in the fourth quarter, or a growth rate of 3.2 percent when compared to the fourth quarter a year ago. This growth is slightly lower than the 3.7 percent of the previous quarter. Wage and salary income grew by just 2.8 percent.

The employment news is disappointing as well. Just two years ago the unemployment rate during the fourth quarter averaged 4.0 percent and nonagricultural employment was growing

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by 2.7 percent. By the fourth quarter of FY03 the unemployment rate had climbed to 6.1 percent and nonagricultural employment had contracted by 0.3 percent. With the exception of the service sector all major sectors of the economy registered job losses during the fourth quarter. The biggest drop in employment was in manufacturing with a loss of 577,000 jobs.

#### STATE ECONOMY Fourth Quarter FY03

Personal income is the broadest measure of a state's economic performance. Kentucky's personal income is estimated to be \$106.9 billion in the fourth quarter of FY03, an increase of 2.5 percent from a year ago. The U.S. figure for this period is estimated at 3.2 percent. Wage and salary income for both Kentucky and the U.S. were up an identical 2.3 percent in the fourth quarter compared to a year ago. The low growth in wages, and hence, total personal income, in Kentucky is due to overcapacity in key high-wage sectors like transportation equipment.

Employment data is commonly used to gauge the strength of the state's economy, primarily because of its timely availability and its impact on consumer spending and confidence. Nonagricultural employment in Kentucky declined by an estimated 0.1 percent resulting in the loss of 2,700 jobs. The strong dollar and overcapacity in the world market caused imports to increase rapidly during the first nine months of the

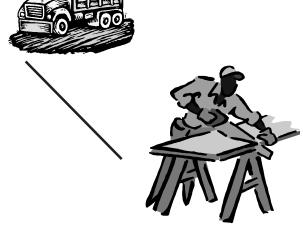
fiscal year. This has impacted both production and employment in Kentucky.

Employment in manufacturing fell by 5.4 percent. The turndown was expected in industries like fabricated metal products and industrial machinery, but even industries like transportation equipment were impacted. In the automobile sector though, employment for the quarter grew by 0.4 percent. Weekly earnings in this sector dropped 11.6 percent as overtime pay plummeted.

Transportation, communication, and public utilities (TCPU) posted losses in the fourth quarter (down 3.5 percent) driven primarily by trucking and the communications sector. The surprise was a slight rebound in the air transportation sector. Until the fourth quarter the mining sector was growing due to an increase in the demand for coal. But by the fourth quarter the market had weakened in response to lower oil prices and employment declined by 9.1 percent. The services sector continued to grow with an overall increase of 3.2 percent. It must be noted that this gain in the services sector will probably be revised once the classification of service employment changes from Standard Industrial Classification (SIC) to the new North American Industry Classification System (NAICS). The reclassification will move some non-production related jobs from manufacturing to services. The restructuring of manufacturing and the loss of middle manager jobs during the current slowdown will impact the newly defined services sector.

Table 1.1
National Economic Indicators
Fourth Quarter 2003

Fourth Quarter 2003			
	FY02	FY03	Chg*
Real GDP	9,392.4	9,599.0	2.2
(bil 1996 \$)			
Personal Income	8,914.0	9,199.1	3.2
(bil \$)			
Consumer Price Index	179.5	183.6	2.3
(1992-94=100)			
Industrial Production	110.5	110.1	-0.4
(1992=100)			
Civilian Labor Force	144.8	146.2	1.0
(millions)			
Total Nonagricultural	130.7	130.4	-0.3
Employment			
(millions)			
Manufacturing	16.8	16.2	-3.4
Employment			
(millions)			
Unemployment Rate	5.8	6.1	-
(percent)			



Sources: Global Insight, and U.S. Department of

Commerce, BEA.

Data for FY03 are June 2003 estimates.

Table 1.2
Selected Kentucky Economic Indicators
Seasonally Adjusted Data - Fourth Quarter 2003

			%
	FY02	FY03	Chg*
Total Personal Income (\$mil)	104,271	106,920	2.5
Wage & Salary Income (\$mil)	56,996	58,288	2.3
Total Nonagricultural Employment	1,820.3	1,817.6	-0.1
Mining	20.2	18.3	-9.1
Construction	88.0	89.1	1.2
Manufacturing	299.8	283.5	-5.4
Transportation, Communication, & Public Utilities	105.7	101.96	-3.5
Trade	428.4	428.9	0.1
Finance, Ins., & Real Estate	75.6	72.4	-4.2
Services	491.2	507.1	3.2
Government	311.4	316.3	1.6

<sup>\*</sup> Seasonally adjusted rate from a year ago.

Source: GOEA June 2003

<sup>\*</sup> Seasonally adjusted annual rate.

## **Revenue Receipts**

#### GENERAL FUND Fourth Quarter FY03

The General Fund posted a net decline of 1.2 percent in the fourth quarter of FY03 following three quarters of growth. Receipts in the fourth quarter totaled \$1,783.8 million compared to \$1,805.2 million for the fourth quarter of FY02. Collections in the major revenue categories are shown in summary form in Table 1.3. Detailed information on these and other accounts is available in Appendix A.

Variations in the quarterly receipts are often affected by differences in the timing of payments and refunds into revenue accounts. In the fourth quarter, property taxes and both individual and corporate income taxes were affected to a degree by these timing differences.

The sales and use tax growth rate was nearly flat at 0.2 percent, compared to the growth rate during the fourth quarter of FY02 of 3.0 percent. Receipts for the quarter totaled \$581.6 million, compared to \$580.5 million in the fourth quarter of FY02.

Individual income tax receipts exhibited a decline of 2.9 percent in the fourth quarter of FY03. Receipts of \$780.6 million for the fourth quarter compare to receipts of \$803.6 million collected during the same period last year.

Corporation income tax and license tax receipts posted healthy growth in the fourth quarter. Receipts totaled \$178.6 million, an increase of 12.8 percent over

the \$158.4 million collected during the fourth quarter last year.

Coal severance tax receipts continued to drop in this fiscal quarter. Collections of \$35.5 million compare to \$37.5 million for the fourth quarter of FY02, for a net decline of 5.4 percent.

Total property tax receipts of \$54.4 million compared to \$57.0 million collected in the fourth quarter of FY02 a decrease of 4.6 percent. This decline was primarily the result of timing differences, which are not uncommon for property tax collections.

Lottery receipts of \$41.0 million were down 2.4 percent from last year's fourth quarter total of \$42.0 million.

The "all other" category, which represents the remaining accounts of the General Fund, decreased by 11.2 percent with receipts of \$112.1 million for the fourth quarter. This decline was primarily the result of negative investment earnings for the quarter resulting from net interest costs incurred from cash flow borrowings.

#### ROAD FUND Fourth Quarter FY03

The Road Fund also posted a small decrease during the fourth quarter of FY03. Receipts totaled \$298.2 million and compare to \$301.0 million from the fourth quarter of last year, for a net decline of 0.9 percent for the quarter. The Road Fund increased by a tepid 0.4 percent for the year as a whole. Summary data are contained in Table 1.4 and detailed data are shown in the Appendix.

Motor fuels tax receipts increased 2.5 percent during the fourth quarter. Receipts were \$112.8 million and compare to \$110.1 million collected during the fourth quarter of last year. Year-end figures show growth of 2.0 percent for FY 03.

Motor vehicle usage tax receipts had a modest increase of 3.0 percent during the fourth quarter, following two quarters of decline. Receipts were \$114.4 million and compare to \$111.0 million collected during the same period last year.

Weight distance tax receipts of \$18.7 million represent a 0.9 percent increase over receipts of \$18.5 million during the fourth quarter of last year.

The remainder of the accounts in the Road Fund combined for a decrease of 14.8 percent. Receipts for the "all other" category totaled \$52.3 million during the fourth quarter, compared to \$61.4 million during the fourth quarter of FY 02.

Table 1.3
Summary General Fund Receipts
Fourth Quarter, FY03
(Millions of Dollars)

			Percent
Type Tax	FY02	FY03	Change
Sales and Use	580.5	581.6	0.2
Individual Income	803.6	780.6	-2.9
Corporation Inc./Lic.	158.4	178.6	12.8
Coal Severance	37.5	35.5	-5.4
Property	57.0	54.4	-4.6
Lottery	42.0	41.0	-2.4
All Other	126.2	112.1	-11.2
TOTAL	1,805.2	1,783.8	-1.2

Table 1.4 Summary Road Fund Receipts Fourth Quarter, FY03

			Percent
Type Tax	FY02	FY03	Change
Motor Fuels	110.1	112.8	2.5
Motor Vehicle Usage	111.0	114.4	3.0
Weight Distance	18.5	18.7	0.9
All Other	61.4	52.3	-14.8
TOTAL	301.0	298.2	-0.9

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# II.

Fiscal Year 2003

## The Economy

#### NATIONAL ECONOMY Full Year FY03

The study of economic cycles relies to a large extent on the ability to correlate one cycle to another. These are developed into rules of thumbs to describe average or typical cycles. Thus, a typical contraction is thought to be followed by a rebound in response to factors related to pent-up demand and low inventories. However, this hasn't happened in a sustained way for this recovery.

Real GDP is estimated to have grown by 2.6 percent during FY03, following the 0.8 percent growth during the recession period of FY02. The slow growth is thought to be related to a general lack of pent-up domestic demand as well as foreign demand. Real consumption for FY03 was up 2.8 percent—almost the same as the 2.7 percent increase during the recession of FY02<sup>1</sup>. Consumers couldn't be lured to buy big-ticket items even with historically low interest rates. Consumption of durable goods grew by 4.7 percent in FY03 compared to 8.2 percent in FY02. Overall the auto industry was the worst hit with growth down from 9.1 percent in FY02 to 2.9 percent in FY03. The explanation is thought to lie mainly in the slide in consumer confidence even as automobiles were being advertised with up to \$3,000 cash-back and zero-percent financing. The consumption of services was up just 2.2 percent, with most of the gain coming from

medical services instead of transportation services or personal services.

Factors like low consumer confidence, the high unemployment rate, and the uncertainty associated with the war in Iraq would normally have kept investments down. But diminishing inventories over the last two years finally had their impact and investment grew by 3.9 percent. The overbuilt communications sector still haunts the business world and investment in this sector contracted by 13.5 percent.

Nonagricultural employment declined by 0.4 percent to a total of 130.7 million. The labor force, however, increased by 1.1 percent, i.e., the number of people looking for work went up. Again, as rules of thumb for business cycles go, this is a departure from the past. During the initial recovery periods a weak economy and less attractive wages cause more people to drop out of the work force resulting in a contraction of the civilian labor force. This is the "discouraged worker" phenomenon. A possible reason for the unusual rise in labor force during FY03 could be that real wages haven't fallen substantially, and in historical terms the unemployment rate is still fairly low.

#### STATE ECONOMY Full Year FY03



Following the recovery in US GDP in FY03 (it rebounded from 0.8 percent in FY02 to 2.6 percent in FY03) expectations for a similar recovery were high for the Kentucky economy. However, the growth in GDP failed to translate into a rebound in employment and income. The

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<sup>&</sup>lt;sup>1</sup> In July 2003 the official arbiter of business cycles, the National Bureau of Economic Research, declared that the recession that began in March 2001 ended in November of that same year.

substantial investment in infrastructure during the "new economy" surge of the 1990s continues to pay dividends in terms of productivity improvements. Thus an increase in output hasn't translated into an increase in Kentucky employment in highwage durable goods manufacturing sectors.

In the early 1990s Kentucky was barely impacted by the national recession. As the industry mix diversified Kentucky was able to keep pace with the national economy, but still relies on the manufacturing sector as a significant source of relatively well-paying jobs. In Kentucky 16.0 percent of nonagricultural employment is in the manufacturing sector compared to 12.6 percent nationally. Over the past ten years manufacturing employment has steadily declined in the U.S., but Kentucky has had positive growth. During FY02 and FY03, however, the reliance on manufacturing proved to be detrimental. With the manufacturing sector in a recession nationwide Kentucky experienced a 4.9 percent decline in manufacturing jobs in FY02 and 3.0 percent in FY03. This has proved to be even more severe than the 0.7 percent decline in 1991.

Overall nonagricultural employment growth was 0.4 percent, compared to the national decline of 0.4 percent. Mining in Kentucky is dominated by coal, and declined by 4.6 percent as the short-lived demand for coal fell once again in the face of lower oil and gas prices. Employment in construction grew for the year by 1.6 percent. The increase results principally from home-building activity accompanying lower interest rates. The decline in the transportation, communications, and public utilities was from not only the fallout of the

overinvestment in telecommunications, but from the hit taken by the trucking industry due to the weak economy and the consequent low demand for goods.

Kentucky's personal income growth, a measure of spending power in FY03 averaged 2.8 percent compared to 3.4 percent nationally. The wage and salary component grew by 2.6 percent. The slim growth in the wage component is expected to dampen the chances of a consumer driven recovery in Kentucky.

Table 2.1
National Economic Indicators
Average FY03

	FY02	FY03	Percent* Change
Real GDP (bil 1996 \$)	9,297.7	9,541.4	2.6
Personal Income (bil \$)	8,781.1	9,081.4	3.4
Consumer Price Index (1992-94=100)	178.2	182.2	2.2
Industrial Production (1992=100)	109.8	110.6	0.7
Civilian Labor Force (millions)	144.1	145.7	1.1
Total Nonagricultural Employment (millions)	131.1	130.7	-0.4
Manufacturing Employment (millions)	17.1	16.5	-6.2
Unemployment Rate (percent)	5.5	5.9	-

<sup>\*</sup> Seasonally adjusted annual rate. Sources: Global Insight, and U.S. Department of Commerce, BEA. Data for FY03 are June 2003 estimates.

Table 2.2 Selected Kentucky Economic Indicators Seasonally Adjusted Data FY03 Average

	FY02	FY03	Percent Change
Total Personal Income (\$ mil) Wage & Salary Income (\$ mil)	102,699	105,587	2.8
	56,426	57,880	2.6
Total Nonagri Employment (thousands) Mining Construction Manufacturing Transportation, Communication, & Public Utilities	1,820.5	1,827.5	0.4
	20.4	19.5	-4.6
	88.6	90.1	1.6
	301.2	292.2	-3.0
	106.8	103.81	-2.8
Trade	426.2	428.1	0.5
Finance, Insurance, and Real Estate	76.0	74.6	-1.8
Services	489.1	502.6	2.8
Government	312.2	316.5	1.4

Source: GOEA June 2003

## **Revenue Receipts**

#### ANNUAL TOTALS Full Year FY03

The General Fund grew by 3.4 percent in FY03, after declining by 1.4 percent in FY02. Several one-time events influenced General Fund revenues for the fiscal year; those events are discussed in more detail later in this section. The Road Fund grew by a small 0.4 percent, following growth in FY02 of 5.2 percent. This reduced growth rate was expected, as elevated levels of motor vehicle purchasing that had generated strong growth in motor vehicle use taxes began to level out in FY03.

Appendix A provides fourth quarter and fiscal year details of General Fund and Road Fund receipts for FY03 and FY02. Appendix B provides details on the changes in the major revenue sources of both funds for the past ten fiscal years.

As shown in Table 2.3, combined tax and non-tax receipts for the General and Road Funds increased by 3.0 percent over the combined receipts in FY02. Table 2.4 compares only tax receipts for the two funds, which increased by 3.5 percent. Table 2.5 compares combined nontax receipts, which decreased by 9.1 percent over the previous year.

#### Table 2.3 Total Receipts (millions of dollars)

	FY02	FY03	% Change
General Fund	6,560.2	6,783.5	3.4
Road Fund	1,119.0	1,123.1	0.4
TOTAL	7,679.2	7,906.6	3.0

# Table 2.4 Tax Receipts (millions of dollars)

	FY02	FY03	% Change
General Fund	6,292.0	6,543.2	4.0
Road Fund	1,052.8	1,059.3	0.6
TOTAL	7,344.8	7,602.5	3.5

#### Table 2.5 Nontax Receipts (millions of dollars)

	FY02	FY03	% Change
General Fund	268.2	240.3	-10.4
Road Fund	66.2	63.8	-3.6
TOTAL	334.4	304.1	-9.1

#### **General Fund**

General Fund receipts for the year increased by 3.4 percent over those reported in FY02. Total General Fund receipts of \$6.783.5 million compare to \$6.560.2 million collected in FY02. Receipts for FY03 were influenced by a tax amnesty program that generated significant receipts, and by several "one-time" events within particular taxes that provided increases for this fiscal year that are not expected to occur again. In FY03, tax amnesty and the other one-time events are estimated to have boosted General Fund revenues by \$192.5 million. If not for these one-time events. growth in General Fund revenues is estimated to have been only 0.5 percent.

Table 2.6 shows General Fund receipts in summary form by major tax types for FY03 compared to FY02, and the associated growth rates. Table 2.7 compares the growth rates in major General Fund

categories and the fund as a whole for the entire year and the four individual quarters.

The sales tax growth rate continues to be the most consistent performer of the large taxes, even though the growth rate is small compared to the previous decade. The growth rate for FY03 was 2.8 percent, and compares to the growth rate for FY02 of 2.3 percent. Receipts of \$2,364.2 million compare to prior year receipts of \$2,300.0 million. Excluding the 'tax amnesty' program and other one time collections, sales tax would likely have been nearly flat for the fiscal year.

The individual income tax posted small positive growth, after the decline posted in FY02. The growth rate for FY03 was 1.6 percent, compared to a negative 2.7 percent in FY02. Receipts totaled \$2,746.4 million and compare to \$2,702.5 million collected last year.

Following several years of declining receipts, the corporation income and license tax posted a significant increase of 32.5 percent for the year. Receipts of \$430.6 million compared to \$324.9 million collected in FY02. While this is a significant increase, it is still below the corporate income tax collections of two years ago, when \$437.4 million was collected in FY01. Both tax amnesty and one-time collections had a positive influence on corporate tax collections for this fiscal year.

Coal severance tax collections declined by 11.5 percent for the year. Receipts totaled \$141.7 million and compare to \$160.2 million collected during the prior fiscal

year. The decrease in coal severance tax receipts brings collections back in line with the slowly decreasing pattern of the last several years. FY02's notable increase was primarily due to significant fluctuations in energy prices, which resulted in significantly increased demand for coal. However, energy prices have since stabilized, and the demand for coal has decreased. Collections for FY03 are nearly identical to coal severance taxes collected in FY01.

Total property taxes experienced a small increase of 0.4 percent during this fiscal year. Receipts totaled \$434.8 million compared to \$433.0 million collected in FY02. Timing differences with distributions of some collections had a minor impact on property tax receipts.

Lottery receipts grew by 1.2 percent from the previous year. Receipts of \$171.0 million compare to the \$169.0 million remitted to the state last fiscal year.

The "all other" category finished the year with an increase of 5.1 percent. Receipts of \$494.8 million compare to \$470.6 million collected in FY02.

Table 2.6
Summary General Fund Receipts
Year End Totals FY03
(millions of dollars)

Type Tax	FY02	FY03	Change
Sales and Use	2,300.0	2,364.2	64.2
Individual Income	2,702.5	2,746.4	43.9
Corporation Inc./Lic.	324.9	430.6	105.7
Coal Severance	160.2	141.7	-18.5
Total Property	433.0	434.8	1.8
Lottery	169.0	171.0	24.2
All Other	470.6	494.8	5.1
TOTAL	6.560.2	6.783.5	223.3

Table 2.7
General Fund Growth Rates for the Four Quarters
and Full Year FY03
(percent)

	1st QTR	2nd QTR	3rd QTR	4th QTR	FY03
Sales and Use	9.8	3.0	-1.9	0.2	2.8
Ind Income	-1.8	3.4	10.2	-2.9	1.6
Corp Inc./Lic.	28.5	80.2	61.5	12.8	32.5
Coal Severance	-13.9	-10.4	-16.1	-5.4	-11.5
Property	21.4	-3.5	3.7	-4.6	0.4
Lottery	2.6	-18.4	28.2	-2.4	1.2
All Other	7.3	40.7	8.1	-11.2	5.1
Total Receipts	5.0	5.1	5.3	-1.2	3.4

#### **Road Fund**

Total Road Fund receipts increased by 0.4 percent during FY03. Total receipts of \$1,123.1 million compare to \$1,119.0 million collected in this fund during FY02.

Table 2.8 shows Road Fund receipts in summary form by major tax types for FY03 compared to FY02. Table 2.9 displays the growth rates for the Road Fund and its major tax categories for the year as a whole and the four individual quarters.

Motor fuels taxes increased by 2.0 percent on receipts of \$438.6 million, compared to \$429.8 million collected during the previous fiscal year.

Motor vehicle usage tax receipts of \$432.9 million represent a small increase of 0.8 percent over the \$429.3 million collected in FY02. This compares to an increase of 8.2 percent experienced last year.

The weight distance tax posted a small increase for the year and finished with growth of 2.1 percent. Receipts totaled

\$76.9 million for this year and \$75.3 million for the last fiscal year.

The "all other" category decreased by 5.4 percent over the previous year. Total receipts in this category were \$174.8 million, which compares to \$184.6 million collected in FY02.

Table 2.8
Summary Road Fund Receipts
Year End Totals for FY03
(millions of dollars)

Type Tax	FY02	FY03	Change
Motor Fuels	429.8	438.6	8.8
Motor Vehicle Usage	429.3	432.9	3.6
Weight Distance	75.3	76.9	1.6
All Other	184.6	174.7	-9.9
TOTAL	1,119.0	1,123.1	4.1

Table 2.9
Road Fund Growth Rates
for the Four Quarters and Full Year FY03
(percent)

	1st	2nd	3rd	4th	
	QTR	QTR	QTR	QTR	FY03
Motor Fuels	5.5	5.4	-5.2	2.5	2.0
Motor Veh Usage	14.8	-10.0	-3.5	3.0	8.0
Weight Distance	2.8	4.0	0.6	0.9	2.1
All Other	17.1	-17.0	1.9	-14.8	-5.4
Total Receipts	10.4	-4.3	-3.0	-0.9	0.4

#### **EMPOWER Kentucky**

The EMPOWER Kentucky revenue enhancement initiatives have continued during FY03. Collections during the fiscal year are shown in Table 2.10. EMPOWER Kentucky is a program that funds, among other things, specific procedures within the Revenue Cabinet. These procedures are designed to collect certain revenues that are owed to the Commonwealth but are not voluntarily paid.

Table 2.10
EMPOWER Kentucky Revenue Collections during FY03
(millions of dollars)

Type of Tax	Collections during FY03
Individual Income	33.8
Corporation Income	5.6
Sales and Use Tax	18.6
Property Tax	16.2
Other	1.8
TOTAL	76.0

#### **Tax Amnesty**

The Kentucky Revenue Cabinet conducted a tax amnesty program during FY03. The intent of the program was to encourage

taxpayers who owed back taxes to the Commonwealth to voluntarily declare and remit the past due funds. Encouragement to participate was provided by waiver of penalties and interest for almost all past due taxes that were acknowledged and paid during the amnesty period. Penalties and interest rates were increased for all those who owed back taxes but chose not to participate in the amnesty program, and for most future collection efforts. The tax amnesty program is estimated to have generated \$ 123.4 million in receipts during FY03. A final accounting of amnesty revenues is being prepared by the Revenue Cabinet.

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# III.

**Interim Outlook** 

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## **Interim Outlook**

#### NATIONAL ECONOMY First Three Quarters FY04

Economists as a group are famously known for being unable to agree on critical turning points of the economy. This time around, however, most national economists think that an economic recovery is underway. The change from the tentative recovery of FY03 to a more stable and sustained recovery in FY04 is not expected to be dramatic. At times the FY04 performance may even appear worse than FY03.

Real GDP is expected to show a gain of 2.9 percent from a year ago during the July-to-March period of FY04. Though this is essentially unchanged from the 2.8 percent growth experienced

during the same period in FY03, the difference lies in the steady, step-by-step ratcheting of the growth in output.

Over the last three years consumption has played a greater role in real GDP as the other components—investment, net exports, and government spending—have been hit by overcapacity, the strong dollar, and state government budget woes which have counterbalanced federal government spending. During the first three quarters of FY04 consumption is expected to increase by 2.7 percent with the aid of durable goods (up 3.2 percent) and services (up 2.5 percent). The numbers show, however, that the consumer is still unwilling to embrace this recovery. Consumption growth a year

ago was slightly higher at 2.9 percent, and the consumption of durable goods was substantially higher at 5.5 percent. Motor vehicles and parts are expected to remain as a drag on the economy with an increase of 0.6 percent compared to 3.8 percent a year ago.

Investments are expected to show a tepid increase of 2.5 percent in contrast to 4.8 percent a year ago. Businesses are expected to invest only enough to re-stock inventory.

The slow increase in domestic investment is directly related to the unused overcapacity abroad. Investment in public utilities is forecast to decline by 5.3 percent during this period primarily due to overcapacity in both the telecommunications and power sectors. Government purchases had climbed substantially by 3.6 percent a year ago, and are projected to be up 2.4 percent in

the first nine months of FY04. The slower growth is related to both a ratcheting down of defense spending and the budget crisis faced by 37 of the 50 state governments.

#### STATE ECONOMY First Three Quarters FY04

The impact of the national recovery will be felt in the state economy. However, since the goods-producing sectors dominate the state economy the recovery is expected to be more prolonged. Personal income is estimated to increase by 2.7 percent during the July-to- March FY04 period compared to a 4.1 percent increase nationally. The drag on Kentucky's income is from the

wages and salaries component, which is expected to increase by 2.3 percent versus 4.1 percent nationally.

The difference in the recovery cycle can be traced to the industrial mix in Kentucky. During FY04, 15.6 percent of Kentucky's nonfarm employment is estimated to be in manufacturing compared to 12.1 percent nationally. At the same time total nonfarm business productivity is forecasted to increase by 2.8 percent in the first three quarters of FY04. The corresponding figure for manufacturing productivity is 4.0 percent for the same period. The strong productivity numbers and the resulting loss of jobs and work hours is expected to keep down growth in Kentucky's wages and salaries. Normally, increased productivity means the gains go to the factors of production that include labor. However, with the relatively high unemployment rate employers feel little wage pressure, and wages are expected to show little change in the goods producing sector.

Kentucky's nonagricultural employment is expected to remain flat during the first three quarters of FY04 with a gain of 0.1 percent. In percentage terms the worst performance is in the coal mining industry (down 7.8 percent). However, the decline of 3.7 percent in manufacturing employment

will have a greater impact on the economy. The hit to manufacturing is not only from productivity gains and unused industrial capacity abroad, but also from a weakening of the domestic market, especially motor vehicles. During the period July-to-March domestic sales of motor vehicles is forecasted to decline by 6.4 percent following a decline of 3.4 percent a year ago. This will slow down the recovery in the area of transportation equipment and related industries.

The decline in employment of 3.8 percent in transportation, communications, and public utilities is expected to come from each of the three components of this sector. Air transportation is slated to lose jobs as airlines restructure to compete. The traditional telecommunications sector with landlines and dial-up systems faces increasing competition from wireless and cable Internet connections. Finally, utility companies, particularly electric utilities, are expected to be under pressure to show profits following the Enron accounting scandal.

The recovery period of FY04 can be viewed as a prolonged turning point with no dramatic changes. Unlike past recessions in which Kentucky's employment changed dramatically, the recovery this time around is expected to be slower.

Table 3.1 **National Economic Outlook for FY04 Quarters 1, 2 & 3** 

	FY03	FY04	% CHG*
Real GDP (bil 1996 \$)	9,522.2	9,803.0	2.9
Personal Income (bil \$)	9,042.2	9,409.7	4.1
Consumer Price Index (1992-94=100)	181.7	184.8	1.7
Industrial Production (1992=100)	110.8	112.3	1.4
Civilian Labor Force (millions)	145.5	146.9	1.0
Total Nonagricultural Employment (millions)	130.7	131.1	0.2
Manufacturing Employment	16.5	15.9	-3.6
(millions) Unemployment Rate (percent)	5.8	6.1	-

\* Seasonally adjusted annual rate. Sources: Global Insight and U.S. Department of Commerce, BEA. Data for FY03 are June 2003 estimates.

Table 3.2 **Kentucky Economic Outlook for FY04 Quarters 1, 2 & 3** 

	FY02	FY03	% CHG*
Total Personal Income (\$ mil)	105,475	108,297	2.7
Wage & Salary Income (\$ mil)	57,845	59,159	2.3
Total Nonagri Employment (thousands) Mining Construction Manufacturing Transportation, Communication, & Public Utilities	1,830.7	1,832.0	0.1
	19.9	18.3	-7.8
	90.4	88.8	-1.9
	295.1	284.3	-3.7
	104.4	100.5	-3.8
Trade Finance, Insurance, and Real Estate Services Government	427.9	430.9	0.7
	75.3	75.5	0.2
	501.1	517.4	3.2
	316.6	316.4	-0.1

<sup>\*</sup> Seasonally adjusted rate from a year ago. Source: GOEA June 2003

#### **GENERAL FUND**

Projected General Fund revenues for the next three quarters are shown in Table 3.3. Anticipated revenues over the three-quarter forecast horizon total \$4,802.3 million, a growth rate of -3.9 percent compared to the same period of FY03. The decline in revenues is mainly resulting from the extraordinary one-time revenues received in FY03. These receipts, which totaled approximately \$162 million during the first three quarters of FY03, and a weak economic outlook combine to produce an expected dip in revenues for the first three quarters of the current fiscal year.

Comparison to the consensus revenue estimates is not meaningful since that estimate is not constructed on a quarterly basis. The official revenue forecast on which the budget was based calls for growth in FY04 to be 4.2 percent. Given the differences in the timing of receipts into various accounts, one should not infer a similar growth rate for the first three quarters of the fiscal year.

Total sales and use tax receipts for the first three quarters is expected to decline by 0.6 percent. This account was positively affected by a one-time payment and by revenues received through the tax amnesty program in FY03. Enacted legislation from the 2003 General Assembly will boost revenues marginally, but not enough to offset the losses of the one-time money.

The interim forecast for the **individual income tax** calls for a drop of 7.8 percent. Strong declaration payments in January 2003 boosted this revenue artificially;

these payments will not be realized in the current fiscal year. Withholding payments are expected to be nearly stagnant reflecting the poor employment climate in the early part of FY04.

The outlook for **corporation income and license taxes** is for a slight decline from last year's surprising growth. Growth is anticipated to be -2.9 percent in the first three quarters of FY04. These taxes benefited from the amnesty program that will not be in place in the current fiscal year.

The **coal severance tax** resumed its downward track in FY03, and a continuation of that trend is expected in FY04, although not as steeply. Collections are expected to fall by 1.8 percent for the first three quarters.

**Property taxes** can be affected by timing differences, and in the upcoming three quarters of FY04, revenues are expected to be off slightly, with a decline of 0.7 percent.

Lottery revenues dedicated to the General Fund will be down by 5.5 percent in the first three quarters, due primarily to the reallocation of unclaimed prize money into a special fund to benefit higher education. Lottery revenues are also under pressure from the budding Tennessee lottery.

The "other" category contains estimates for several of the smaller revenue sources not otherwise classified. A drop of 3.6 percent is anticipated during the first three quarters of FY04. Some of the larger items include investment income, inheritance taxes, insurance premium taxes, cigarette

and liquor taxes, and the bank franchise tax.

#### **ROAD FUND**

Growth in the Road Fund over the threequarter forecast horizon is expected to equal 0.7 percent as shown in Table 3.4. **Motor fuels tax** receipts are expected to increase by 2.0 percent in the first three quarters of FY04, nearly matching the growth of 2.2 percent realized last fiscal year.

Motor vehicle usage tax collections are expected to rise by 2.2 percent, bettering their performance in the previous fiscal year. A rebound from an off year in the

automobile industry is expected to help boost receipts.

To estimate the growth of all other components of the Road Fund, transportation officials and GOEA together assessed recent growth patterns as well as administrative factors. Based on the latest evaluation, license and privilege taxes are expected to grow by 13.3 percent over the forecasting horizon. The weight distance tax and surcharge are estimated to increase by 2.2 percent. Removal of tolls on several parkways is expected to result in a decrease of 37.8 percent in toll revenue. Lower balances in the Road Fund are expected to lower investment receipts by 65.6 percent.

Table 3.3

General Fund: Interim Forecast (millions of dollars) July 2003

	FY03	8	Ĺ	FY03	FY04	04
	Quarter 4	r 4	Full Year	Year	Quarters 1, 2 & 3	1,283
		% Chg		% Chg	Interim	% Chg
•	Actual Year Ago	ear Ago	Actual	Year Ago	Estimate Year Ago	ear Ago
I						
Sales & Use	581.6	0.2	2,364.2	2.8	1,771.7	9.0-
Individual Income	780.6	-2.9	2,746.4	1.6	1,812.2	-7.8
Corp Inc. & License	178.6	12.8	430.6	32.6	244.8	-2.9
Coal Severance	35.5	-5.4	141.7	-11.5	104.2	-1.8
Property	54.4	-4.6	434.8	0.4	377.8	-0.7
Lottery	41.0	-2.4	171.0	1.2	122.8	-5.5
Other	112.1	-11.2	494.8	5.1	368.9	-3.6
General Fund	1,783.8	-1.2	6,783.5	3.4	4,802.3	-3.9

Table 3.4

Road Fund: Interim Forecast (millions of dollars) July 2003

	FY03	33	Ē	FY03	FY 04	4
	Quarter 4	er 4	Full	Full Year	Quarters 1, 2 & 3	1,2&3
		% Chg		% Chg	Interim % Chg	% Chg
	Actual	Actual Year Ago	Actual	Actual Year Ago	Estimate Year Ago	'ear Ago
Motor Fuels & MF Use/Surtax	116.4	1.5	454.0	2.2	344.2	2.0
Motor Vehicle Usage & Rental	114.4	3.1	432.9	0.8	325.5	2.2
License & Privilege (excl. WD)	31.6	-17.1	92.6	-8.0	72.5	13.3
Weight Distance Tax/Surtax	18.7	1.1	76.9	2.1	59.5	2.2
Toll Income	3.5	-2.8	13.3	-3.6	6.1	-37.8
Investment	8.2	-20.4	29.1	9.6-	7.2	-65.6
Other	5.4	12.5	21.3	5.4	15.9	0.0
Road Fund	298.2	-0.9	1,123.1	0.4	830.9	0.7

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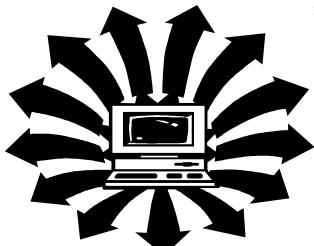
# IV. Microsimulation Model Status Report

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## **Microsimulation Model Status Report**

In recent years, advances in computer

technology as well as expanded data collection and storage capabilities have led to the rise of so-called microsimulation models based on administrative data at the individual taxpayer level. By examining the impact of a change in tax



policy upon each taxpayer, policy makers have a far more detailed tool for analyzing tax impacts than previously when they had to rely solely on aggregated data. One of the most popular purposes for which microsimulation models are used is for individual income tax analysis, due to the more descriptive data included in tax returns. The federal government and most states currently have some type of income tax microsimulation capability.

Microsimulation models potentially allow the analyst to examine the impacts not only of changes in tax policy, but also of exogenous changes like taxpayer characteristics. This allows one to analyze the impact, for instance, of changing demographics over a period of time. Indeed, the capabilities of the model are enhanced by the rich data sets now available for analysis.

#### Weaknesses

Despite their obvious potential, microsimulation models are not extensively used for analysis of other taxes besides income taxes, and even in the case of income taxes, they sometimes perform with

results less than expected.

The principal drawback to microsimulation models lies in the large amount of data required. The only data often available are administrative records from taxation or revenue departments, which normally are collected to facilitate compliance

and audit procedures rather than revenue estimation. It is up to the analyst to configure very large data sets into a manner suitable for microsimulation analysis.

In the case of income taxes, federal IRS tax-return data may be needed to supplement the state data. The federal government is extremely concerned over the possibility of confidential individual taxpayer records being inadvertently released, and has in recent years constricted the availability of this information to the states. (The IRS has data-sharing agreements with taxation departments in the states, but does not extend the sharing of data to other state agencies. The existing rules allow for data to be shared for "tax administration" purposes. In the past, the IRS has approved procedures for "blurring" data by combining and averaging data from several tax returns. But even this approach has been further restricted lately.)

Obviously, the preparation and management of large data sets is a time-

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and resource-intensive effort. Therein lies another weakness of microsimulation models: their expense. Even during times when little is going on in the tax policy arena, the responsible agency must bear the cost of building and/or maintaining these models without having a pressing need to conduct the analysis. This has sometimes led to them being neglected or relegated to a situation of less importance.

Microsimulation models often prove inadequate to model behavioral responses to tax policy. It has long been recognized that taxpayers will modify their behavior in order to minimize their tax liability, although the manner in which they do so, and the extent to which they do so, are not easily translated into actions capable of analysis under the microsimulation regime. For instance, if rates are altered on specific types of income, like capital gains, the microsimulation model can tell what the impact on revenues will be, but the data will only recalculate the tax on the existing tax base. If taxpayers alter the manner in which they take capital gains, then the data will not automatically adjust for that. It is up to the analyst to modify the model in a way that can incorporate behavioral impacts, which requires a separate analytical approach.

The failure of microsimulation models to capture behavioral impacts has been a criticism that is more valid for federal income taxes that have much higher marginal rates than the states. State tax systems, which often are based on federal rules and generally are less progressive than the federal income tax, are usually passively impacted by federal tax changes. When state tax laws are changed without accompanying federal changes, incentives at the federal level may continue to

outweigh state tax considerations in the minds of taxpayers.

Finally, the models are only as good as the data included in the model. Missing variables, inaccurate data entry, or suppressed data all have the potential to degrade the model's accuracy in estimating impacts. In recent years, the practice of blurring or combining individual tax records to protect taxpayer confidentiality, may have also led to degradation in the quality of data.

#### Strengths

Given the acknowledged weaknesses of microsimulation models, it is tempting to question their necessity particularly in times when budgets are tight. However the limitations of microsimulation having been acknowledged—such models are powerful analytical tools that provide unprecedented details of the consequences of tax policy changes. With a properly constructed microsimulation model, many types of policy changes can be analyzed with a great deal of accuracy. Revenue impacts due to proposed changes in marginal tax rates, low-income tax relief, and other proposals can be estimated. Information on specific groups of taxpayers can be obtained through these models. Thus if a policy is proposed to reduce tax burdens on the lower income class, a microsimulation model can provide detailed information on taxpayers by income and display the results by income class.

Ultimately, the failure to provide reliable estimates can prove many times more costly than the maintenance of the models themselves. Reliance on aggregated data, much more readily available, will not provide the analyst with sufficient data to

analyze many tax proposals. Often times the necessary information is not collected at any point by any agency, state or federal, even though the information might be reported by the taxpayers themselves. Through a microsimulation model, such information can be processed and analyzed fairly readily.

#### Kentucky's Current Model

For several years we have relied upon a turnkey model developed by a third-party vendor specifically for Kentucky. The current version of our model was developed by Barents Group, LLC in 1999 and 2000, based on a blurred dataset of 1996 federal and state income tax returns. The Barents model allows limited flexibility in analyzing proposed changes to the tax code. We have the ability to change policy or other input variables through the use of a Windows interface, but do not have the direct ability to alter the underlying computer code. This is not a data problem, but rather a "front end" programming problem. This can be overcome by seeking technical assistance from our contact at the Barents Group, but this is often cumbersome or not possible on short notice.

In Kentucky, the Barents microsimulation model was essential in estimating impacts of Governor Patton's initiative in the mid 1990s to phase-in an increase in the standard deduction. On a continuing basis, the model is used to generate estimates for the Tax Expenditure Analysis prepared every two years. In 1999 and early 2000, the model was relied upon extensively in developing the Governor's proposals that were eventually introduced as legislation in the 2000 General Session. In this effort

both the strengths and shortcomings of the Barents model were revealed.

Comparison of output from the microsimulation models with published IRS statistics of income data has led us to reexamine the blurred database. IRS rules designed to prevent disclosure of individual taxpayer information required that only a third of all taxpayers could be sampled in an unstratified manner. Optimal data sampling techniques would require dividing the dataset into separate groups or "strata", and oversampling of strata containing relatively few observations to improve the reliability of the data. Failure to perform this step potentially means that for strata containing relatively few taxpayers, the

random nature of the sampling process could lead to comparatively larger errors and/or biases. We have been very concerned with this method as it applies to taxpayers in the highest income categories, since a relatively small number of taxpayers provide

a disproportionate amount of income tax revenue. A failure to portray accurately the characteristics of these taxpayers could impede our ability to estimate revenues from these groups.

An additional concern regarding the Barents model is the ability of the vendor to support this model going forward. Since our latest version of the model was developed three years ago, the focus of the Barents Group has shifted away from state and local tax policy analysis. Very few of the individuals who worked to develop this model are still employed at Barents, and their function has been to support existing products rather than to develop new ones. Thus it seems that an option to rely on the

existing microsimulation model is not viable

#### STAX

One tool that has been used with limited success to model tax impacts is the STAX proprietary data compression software that allows large files to be loaded onto a PC. These files can be quickly accessed and displayed. The Kentucky Revenue Cabinet currently has both state and federal STAX programs which are primarily compliance tools.

The data come from a variety of sources including Kentucky's processing tapes and federal IRTF, IMF, BRTF, and BMF tapes. As with other data sources, STAX does not contain a complete dataset since variables not keyed by the IRS or the Revenue Cabinet are missing from the database. Furthermore, there is generally an 18-month lag when receiving the data due to fiscal year filers and taxpayers filing with extensions. A final drawback to the STAX dataset is that amended returns do not appear in the STAX database.

The federal STAX database contains federal data and therefore its use is restricted by IRS disclosure rules. state STAX data, on the other hand. contains state data and could be used in a microsimulation model if the revenue cabinet approves its release. STAX itself does not work as a policy tool because it simply retrieves the tax returns that fit the selection criteria requested by an analyst rather than give summary detail of the query. For example, an analyst looking for taxpayers with capital gains would be presented with a link to all returns with capital gains rather than the number of returns containing capital gains and the total amount of capital gains claimed.

### Development of GOEA's Microsimulation Model

To improve our capabilities to model the individual income tax, in 2001 GOEA began building its own in-house microsimulation model. To run simulations, our model has been in development using SAS code, and has been used to successfully model the impacts of the tax law changes that affect the Kentucky tax forms. The Kentucky Revenue Cabinet has made available to us a database containing information from the returns of over 1.5 million individual income tax returns for tax year 2000. taxpayer-identifying variables were stripped from the database prior to its release to GOEA. The first stage, which was completed in 2002, was to create and organize the database into a form capable of being analyzed.

The database was constructed in three pieces, based on the form type and filing method used by the taxpayer. One piece is based on information filed on the 740EZ form or the 740 form with a postcard identifier. This set contains 598,985 returns. The second data piece includes information from paper returns (other than EZ and post card filers), and is composed of 530,082 returns. The third piece includes data filed electronically or by telefilers. This group has been growing rapidly in recent years, and in 2000 consisted of 498,309 returns.

The drawback to the EZ or paper filers is that the information on the database is limited to only basic items taken from the 740 form itself. No information is available from the taxpayer's federal return, nor from

any attached federal or state schedules. Although this limits the data, it is still suitable for simulation of proposals that only involve variables reported on paper, telefile, and electronic returns. Examples of these simulations include changes in the marginal tax rate structure such as additional tax categories for higher tax brackets or setting a flat tax, changes in the low-income tax credit, applying federal filing status to the Kentucky tax return, adjusting the standard deduction and removing or altering the personal exemption.

The database composed of electronic filers contains a complete set of information from all federal and state returns for those who choose to file electronically with the state. The IRS considers federal tax return data reported by the taxpayer to the Kentucky Revenue Cabinet not to be "federal data" and thus has not objected to this information being shared with GOEA. The Revenue Cabinet has an agreement with GOEA that allows access to this data. Under that agreement, GOEA agrees that this information will be safeguarded from unauthorized disclosure.

GOEA originally had planned to rely upon the data provided by electronic filers for estimating the same variables for EZ and paper filers. Our hope was that this subset of all returns would closely resemble the larger population of all returns, and the missing variables from the paper returns could be supplied by variables from electronic filers. Upon further examination, it was revealed that contrary to our assumption, electronic filers do not represent a random selection of all taxpayers. Table 4.1 provides the number of taxpayers, total AGI, and

Kentucky Income Tax liability by income class. Electronic filers tend to have lower incomes, and in particular does not represent taxpayers with the highest incomes. At the upper end of the income spectrum, during tax year 2000 taxpayers with annual AGI over \$200,000 accounted for 16.0 percent of Kentucky AGI and 20.3 percent of income tax liability. However, an examination of electronic returns shows that within that category, these taxpayers comprise only 2.8 percent of Kentucky AGI and provide only 3.7 percent of income tax liability. Although extrapolations to the entire population is possible from the electronic records, the reliability of the data becomes more questionable when so few of upper-income taxpayers file electronically. An accurate representation of these taxpayers is essential since these relatively few taxpayers pay a disproportionate share of Kentucky's income tax, and often have the most volatile tax responses to changes in policy.

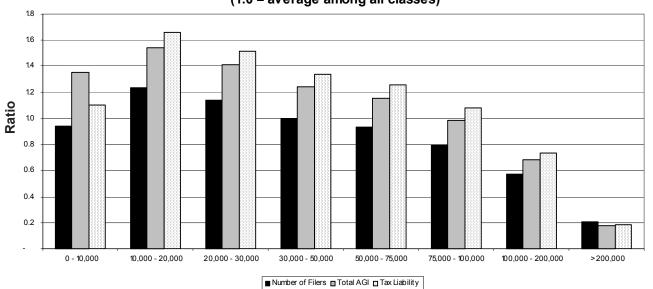
One way to demonstrate the potential bias and reliability problem is to compute a likelihood function for electronic filing by income class. A simple ratio of electronic to total filers would be close to 1:1 if taxpayers in a particular income class were just as likely to file electronically as the average among all income classes. A systematic bias, on the other hand, is revealed when the ratios trend away from the 1:1 ratio. Chart 4.1 compares the likelihood in each income class for the number of filers. adjusted gross income, and tax liability. This chart graphically demonstrates the decreasing reliability of the data, particularly in the upper AGI classes. (A ratio above 1:1 is not a significant problem. since data from the electronic returns is only extrapolated to taxpayers within those income classes.) At the extreme upper end

Table 4.1
Characteristics of Electronic Files Compared to All Taxpayers
2000 Tax Year

Income Class	Number of Filers  All Returns Elec. Returns % of total % of total		Adjusted Gross Income All Returns Elec. Returns % of total % of total		Income 1 All Returns % of total	Fax Liability Elec. Returns % of total
<= 0	1.5	0.7	NA	NA	0.0	0.0
0 - 10,000	26.5	24.8	3.5	4.8	0.7	0.7
10,000 - 20,000	19.5	24.1	8.1	12.5	5.1	8.4
20,000 - 30,000	14.2	16.2	9.9	13.9	9.0	13.6
30,000 - 50,000	17.4	17.5	19.1	23.8	18.9	25.2
50,000 - 75,000	11.6	10.8	19.8	22.9	20.1	25.3
75,000 - 100,000	4.7	3.7	11.2	11.0	11.7	12.7
100,000 - 200,000	3.4	2.0	12.7	8.6	14.2	10.4
> 200,000	1.2	0.2	16.0	2.8	20.3	3.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Chart 4.1

Likelihood of Electronic Filing By Income Class
(1.0 = average among all classes)



of the income distribution (AGI > \$200,000) taxpayers are less than one-sixth as likely to file electronically as in lower income classes where the ratio is 1:1 or higher.

Because of the reduced reliability of the electronic data, the existing database has some drawbacks. This was originally discovered in an examination of capital gains income. Information on sources of income is only available for the EFT returns, since the starting point for the paper returns is the taxpayer's total federal adjusted gross income. Data from EFTs were compared to the STAX and federal SOI data to determine reliability.

In this comparison, it becomes obvious that the EFT data contains a minuscule portion of overall capital gains reported by Kentucky taxpayers. (See Table 4.2.) For instance, the data shows that over 52 percent of all capital gains income reported in tax year 2003 was from taxpayers with AGI above \$200,000. Yet only 3.0 percent of capital gains income for taxpayers in that income class is reported electronically. For this reason, it is more problematic to rely upon the EFT exclusively for estimating the distribution of capital gains among taxpayers, particularly the gains reported on returns showing the highest incomes. While we have not made similar comparison yet for other sources of income, it is likely they will be biased also, due to the overall bias towards lower-income taxpayers in the EFT data. Further analysis of this and possible biases in other data reported via EFT filers vs. the population of taxpayers is underway.

Table 4.2
Capital Gains Reported Electronically and On All Returns, Tax Year 2000 (Percent of Total)

AGI Class (\$)	Capital Gains (losses) reported by ELF	Capital Gains reported by All Taxpayers
< 20,000	0.7	7.9
20,000 - 30,000	4.1	3.1
30,000 - 50,000	4.5	6.1
50,000 - 75,000	4.6	9.5
75,000 - 100,000	7.6	5.1
100,000 - 200,000	5.1	16.0
AGI > 200,000	3.0	52.4
Total	3.7%	100.0%

#### Next Steps

Further development of the SAS routines capable of producing the results of various microsimulation runs is underway. We are in the process of formatting output tables that will be similar to the standard tables produced by the existing Barents model. It is our intent to standardize the model much as possible, and make it possible for any programmer with SAS knowledge to operate the model as well.

This project has made large advances in our capability to understand the potential impacts of changes to Kentucky's individual income tax structure. Through the assistance of the Kentucky Revenue Cabinet, the database of all Kentucky filers has been developed, and in some cases additional data supplied by the Revenue Cabinet has supplemented this very well. In the future, this model will provide a workable, current, and reliable

method by which to analyze changes to the income tax system. This effort, while time-consuming and costly, should save the state significantly vs. the costs of the Barents model. (For instance, an update of the database and code in 1999 was done at a cost of \$250,000.) It should provide us greater flexibility and reliability in our analysis, and ultimately will improve our estimating capabilities significantly, leading to more accurate estimates of future law changes.

To complete the development of the model, it is necessary to statistically estimate the variables excluded from the IIT and EZ paper returns. In order to run microsimulations of proposals that involve components of federal AGI or federal tax liability, we must estimate the missing federal data for the paper or nonelectronic returns. While we had originally hoped the EFT database would be sufficient to

accomplish this, the bias among EFT files has removed this option, and we are exploring alternatives. The most promising, albeit the one that requires additional input from the Kentucky Revenue Cabinet, is to undertake statistical analysis of the federal individual income tax data supplied to it by the IRS. Our needs are not for any "federal" data, but rather for statistical output from which we could approximate the values for Kentucky Statistics from appropriate variables, including the mean, standard deviation, range, and mode, would not contain federal data and would prove very useful in completing our analysis. This would be used to supplement the paper returns only, whereas we would retain all the data for the EFT taxpayers. Completion of this step would put in place all the necessary elements for the full implementation of our in-house microsimulation model

# V. The Streamlined Sales Tax Project: An Update

<b>GOEA</b>	2003:4
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### The Streamlined Sales Tax Project: An Update<sup>1</sup>

The Streamlined Sales Tax Project (SSTP) is an effort by state governments, with input from local governments and the private sector, to simplify and modernize sales and use tax collection and administration. The Project's proposals include tax law simplifications, more efficient administrative procedures, and emerging technologies to substantially reduce the burden of tax collection. The Project's proposals are focused on improving sales and use tax administration systems for both Main Street and remote sellers for all types of commerce. Sellers who do not have a physical presence or "nexus" are not required to collect sales and use taxes unless Congress chooses to require collection from all sellers for all types of commerce. Sellers without a physical presence can volunteer to collect under the proposed simplifications.

The goal of the SSTP is to provide states with a sales tax system that includes the following key features:

- Uniform definitions within tax laws. Legislatures still choose what is taxable or exempt in their state. However, participating states will agree to use the common definitions for key items in the tax base and will not deviate from these definitions.
- Rate simplification. States will be allowed one state rate and a second state rate in limited circumstances (food and drugs). States with local sales tax

<sup>1</sup> The Fiscal Year 2001 Kentucky Quarterly Economic and Revenue Report described the scope and status of the Streamlined Sales Tax Project (SSTP). This is an update on the progress made in the past two fiscal years.

levies are limited to one local sales tax rate and one use tax rate per taxing jurisdiction.

- State level tax administration of all state and local sales and use taxes. Businesses will no longer file tax returns with each local government within which it conducts business in a state.
- Uniform sourcing rules. The states will have uniform and simple rules for how they will source transactions to state and local governments.
- Simplified exemption administration for use- and entity-based exemptions. Sellers will be relieved of any tax if a purchaser improperly claims an exemption, as long as the seller obtains the required identifying information of the purchaser and the reason for claiming the exemption at the time of purchase.
- Uniform audit procedures. Sellers who participate in one of the certified Streamlined Sales Tax System technology models will benefit from reduced liability and audit scope.
- State funding of the system. To reduce the financial burdens on sellers, states will assume responsibility for funding some of the technology models. The states are also participating in a joint business government study of the costs of collection on sellers.

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The SSTP began in early 2000 as an initiative by state governments with input from local governments and the private sector. Kentucky has been a participant in the project since its inception.

Representatives from the Governor's Office for Economic Analysis, the Kentucky Revenue Cabinet, and the Governor's Office for Technology have played an active role in the deliberations of the SSTP.

The Streamlined Sales Tax
Project passed two agreements
that describe legislation that
each state must enact to
accomplish the Project's goals.
First, each participating state
must adopt enabling
legislation referred to as the
Uniform Sales and Use Tax
Administration Act. The Act

allows the state to enter into an agreement with other states to simplify and modernize sales and use tax administration in order to reduce the burden of tax compliance for all sellers and all types of commerce. The Act does not require any amendments to a state's sales and use tax law.

Secondly, states must amend or modify their sales and use tax laws to achieve the simplifications and uniformity required by the participating states working together. The Project refers to this legislation as the Streamlined Sales and Use Tax Agreement. Some states will require only minor changes to current law to implement the requirements of the Agreement. Other states with more complicated sales tax laws may require significant changes to current law to be in accord with the Agreement.

For two years, the SSTP negotiators worked to create a system that would both provide

flexibility to the states, yet provide a much more uniform and simpler system that multistate retailers could use. To provide impetus and credibility to the project, a body consisting of representatives of the states who had passed the Act, known as the Streamlined Sales Tax Implementing States (SSTIS), was created in late 2001. Each state was free to select both the number of delegates and their affiliations of its delegation, but each state was given a

single vote. Delegates included state tax and finance officials, local government officials, and in a few cases, private interests.

On November 12, 2002, thirty states represented in the SSTIS and the District of Columbia approved the interstate Agreement

provisions. The delegates returned to their home states to begin the process of passing enabling legislation that will comply with the provisions of the Streamlined Sales Tax Agreement. The terms of the Agreement provided for it to become effective when at least ten states with twenty percent of the total population of all states imposing a state sales tax have enacted the conforming legislation and are found to be in compliance with the requirements of the Agreement.

In Kentucky, the Act was passed by the General Assembly in its regular 2001 session. The Act permitted the state to continue as an active participant in the Streamlined Sales Tax negotiations. Kentucky was able to cast its affirmative vote when the Agreement was signed in November 2002. The Kentucky Revenue Cabinet prepared draft language for enacting legislation to be introduced in the

"SSTP is to provide states with a sales tax system that includes many uniform features." 2003 General Assembly. This became HB 293, and was introduced by Representative Harry Moberly. The bill was passed by both houses and signed into law by Governor Patton on March 25, 2003. The provisions of the legislation become effective July 1, 2004, at which time Kentucky will petition to become a member of the Governing Board of SSTP states.

The governing board will be composed of all states that have passed the provisions of the Streamlined Sales Tax Agreement and been admitted as member states. The governing board is responsible for interpretations of the Agreement, amendments to the Agreement, and issue resolution. A State and Local Government Advisory Council and a Business and Taxpayer Advisory Council from the private sector will advise the governing board.

The Agreement will become effective once at least 10 states representing 20 percent of the population of those states imposing a sales tax have passed enabling legislation. As of mid-July 2003, seventeen states representing more than 20 percent of the required population have passed the legislation. Since the effective dates of the enabling legislation vary, not all states that have passed legislation are vet in compliance with the Agreement. It is expected that the governing board will at some point in the near future be created by the enacting states, and will begin the task of administering the agreement. By the passage of HB 293. Kentucky has positioned itself to be a founding member of the Governing Board.

The project website is: www.streamlinedsalestax.org

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## **APPENDIX A Fourth Quarter Report**

<b>GOEA</b>	2003:4
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#### KENTUCKY STATE GOVERNMENT REVENUE - GENERAL FUND REVENUE

	Fourth Quarter 2002 - 2003	Fourth Quarter 2001 - 2002	Percent Change	Year-to Date 2002 - 2003	Year-to Date 2001 - 2002	Percent Change
TOTAL GENERAL FUND	\$1,783,763,549	\$1,805,230,987	-1.2%	\$6,783,458,295	\$6,560,216,551	3.4%
Tax Receipts	1,730,470,608	1,737,632,898	-0.4	6,543,157,657	6,292,004,457	4.0
Sales and Gross Receipts	643,881,796	638,339,434	0.9	2,577,542,870	2,497,020,953	3.2
Beer Consumption	1,603,096	1,687,864	-5.0	6,334,169	6,286,734	0.8
Beer Wholesale	9,260,521	9,189,064	0.8	35,969,890	34,596,592	4.0
Cigarette	4,711,205	3,629,683	29.8	16,367,947	13,943,208	17.4
Distilled Spirits Case Sales	21,062	20,208	4.2	85,601	81,922	4.5
Distilled Spirits Consumption	2,155,745	2,049,993	5.2	8,680,833	8,266,005	5.0
Distilled Spirits Wholesale	4,029,983	3,768,478	6.9	16,088,048	15,129,146	6.3
Insurance Premium	35,553,123	33,109,346	7.4	114,988,790	105,102,951	9.4
Pari-Mutuel	2,836,096	2,287,727	24.0	5,953,247	5,179,952	14.9
Race Track Admission	26,330	56,829	-53.7	193,114	260,232	-25.8
Sales and Use	581,557,946	580,483,998	0.2	2,364,182,478	2,299,990,621	2.8
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Wine Consumption	462,200	438,782	5.3	1,902,818	1,786,984	6.5
Wine Wholesale	1,664,489	1,617,463	2.9	6,795,936	6,396,603	6.2
License and Privilege	110,485,581	107,697,246	2.6	379,857,645	356,591,984	6.5
Alc. Bev. License Suspension	120,300	64,600	86.2	227,850	220,800	3.2
Coal Severance	35,502,035	37,532,696	-5.4	141,664,981	160,160,116	-11.5
Corporation License	63,576,634	57,607,852	10.4	152,595,257	117,500,770	29.9
Corporation Organization	23,790	18,554	28.2	190,494	144,233	32.1
Occupational Licenses	101,223	96,064	5.4	197,977	226,609	-12.6
Oil Production	801,015	699,996	14.4	3,116,954	2,590,722	20.3
Race Track License	37,500	53,850	-30.4	322,825	37,423	762.6
Bank Franchise Tax	2,469,939	6,286,101	-60.7	53,747,906	50,549,169	6.3
		, ,	-8.9	, ,	· · ·	
Driver License Fees	123,311	135,419		499,003	505,187	-1.2
Minerals Severance Natural Gas Severance	3,403,593 4,326,241	2,721,180 2,480,935	25.1 74.4	12,580,912 14,713,486	12,355,174 12,301,781	1.8 19.6
Natural Sub Severance	4,020,241	2,400,000		14,7 10,400		
Income	895,627,878	904,331,722	-1.0	3,024,422,738	2,909,863,799	3.9
Corporation	115,013,114	100,765,814	14.1	278,035,794	207,353,777	34.1
Individual	780,614,764	803,565,908	-2.9	2,746,386,944	2,702,510,022	1.6
Property	54,370,715	56,972,010	-4.6	434,768,249	433,029,587	0.4
Bank Deposits	33,323	51,882	-35.8	456,527	460,334	-0.8
Building & Loan Association	3,022,838	2,082,153	45.2	3,181,373	2,249,927	41.4
Distilled Spirits	16.744	232	7128.8	442,092	363,410	21.7
General - Intangible	3,159,380	402,782	684.4	25,883,197	23,113,567	12.0
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General - Real	(1,423,827)	5,627,889		186,000,177	179,678,050	3.5
General - Tangible	43,073,886	39,218,360	9.8	149,426,286	151,308,795	-1.2
Omitted & Delinquent	1,549,551	5,706,526	-72.8	20,368,623	25,649,592	-20.6
Public Service	4,882,790	3,799,704	28.5	48,836,372	49,991,359	-2.3
Other	56,030	82,482	-32.1	173,603	214,552	-19.1
Inheritance	17,756,775	26,716,406	-33.5	95,864,480	83,359,872	15.0
Miscellaneous	8,347,863	3,576,081	133.4	30,701,674	12,138,263	152.9
Legal Process	6,394,169	1,238,247	416.4	22,994,148	5,263,021	336.9
T. V. A. In Lieu Payments	1,935,744	2,331,301	-17.0	7,660,437	6,814,492	12.4
Other	17,950	6,533	174.8	47,090	60,750	-22.5
Nontax Receipts	51,689,233	66,212,104	-21.9	233,694,271	260,466,324	-10.3
Departmental Fees	5,271,223	5,417,270	-2.7	21,982,797	19,570,116	12.3
PSC Assessment Fee	5,939,567	8,824,184	-32.7	8,702,466	10,455,826	-16.8
Fines & Forfeitures	6,290,834	10,288,506	-38.9	28,888,326	40,069,496	-27.9
Interest on Investments		(440,344)	-30.9	(7,157,704)		
	(7,880,121)	, , ,		,	13,342,627	1.2
Lottery	41,000,000	42,000,000	-2.4	171,000,000	169,000,000	1.2
Miscellaneous	1,067,731	122,489	771.7	10,278,386	8,028,259	28.0
Redeposit of State Funds	1,603,708	1,385,985	15.7	6,606,367	7,745,769	-14.7

#### KENTUCKY STATE GOVERNMENT REVENUE - ROAD FUND REVENUE

	Fourth Quarter 2002 - 2003	Fourth Quarter 2001 - 2002	Percent Change	Year-to Date 2002 - 2003	Year-to Date 2001 - 2002	Percent Change
TOTAL ROAD FUND Tax Receipts-	\$298,231,795 281,073,928	\$300,992,931 282,351,588	-0.9% -0.5	\$1,123,103,133 1,059,296,184	\$1,119,005,317 1,052,848,911	0.4% 0.6
Sales and Gross Receipts	230,913,974	225,702,379	2.3	886,809,027	873,623,010	1.5
Motor Fuels Taxes	112,835,064	110,063,646	2.5	438,564,438	429,812,296	2.0
Motor Fuels Use & Surtax	3,623,175	4,486,141	-19.2	14,969,884	14,124,035	6.0
Truck Trip Permits (fuel)	98,366	111,080	-11.4	371,406	383,460	-3.1
Motor Vehicle Usage	114,357,370	111,041,512	3.0	432,903,299	429,303,220	0.8
License and Privilege	50,159,954	56,649,209	-11.5	172,487,157	179,225,901	-3.8
Motor Vehicles	26,972,513	33,628,356	-19.8	76,192,363	84,510,332	-9.8
Motor Vehicle Operators	1,363,295	1,450,542	-6.0	5,610,829	5,564,009	8.0
Weight Distance	18,686,650	18,520,561	0.9	76,851,211	75,265,639	2.1
Truck Decal Fees	591,850	593,821	-0.3	673,481	807,089	-16.6
Other Special Fees	2,545,645	2,455,930	3.7	13,159,273	13,078,832	0.6
Nontax Receipts	17,068,852	18,534,630	-7.9	62,789,372	64,071,745	-2.0
Departmental Fees	4,817,595	4,111,302	17.2	18,430,002	15,137,452	21.8
In Lieu of Traffic Fines	344,064	421,711	-18.4	1,374,668	1,960,687	-29.9
Highway Tolls	3,513,341	3,601,571	-2.4	13,263,429	13,785,486	-3.8
Investment Income	8,230,044	10,267,711	-19.8	29,115,311	32,156,652	-9.5
Miscellaneous	163,807	132,335	23.8	605,962	1,031,468	-41.3
Redeposit of State Funds	89,015	106,713	-16.6	1,017,577	2,084,661	-51.2

# APPENDIX B Summary Statistics for General and Road Funds Fiscal Years 1993/94 - 2002/03

# APPENDIX B SUMMARY STATISTICS FOR GENERAL AND ROAD FUNDS MAJOR REVENUE SOURCES FISCAL YEARS 1994-2003

GENERAL FUND			ALCOHOLIC BEVERAGE TAXES				
	<b>Total Receipts</b>			Malt Beverage			
Fiscal		Percent	<b>Fiscal</b>		Percent		
Year	Receipts	Change	Year	Receipts	Change		
1993-94	\$ 4,647,078,322	3.0%	1993-94	\$ 32,553,876	4.4%		
1994-95	5,154,077,980	10.9%	1994-95	33,812,169	3.9%		
1995-96	5,336,883,824	3.5%	1995-96	34,489,349	2.0%		
1996-97	5,663,553,824	6.1%	1996-97	34,830,419	1.0%		
1997-98	6,011,806,561	6.1%	1997-98	35,937,878	3.2%		
1998-99	6,198,387,525	3.1%	1998-99	36,870,323	2.6%		
1999-00	6,478,385,032	4.5%	1999-00	38,385,890	4.1%		
2000-01	6,653,897,653	2.7%	2000-01	38,854,920	1.2%		
2001-02	6,560,216,551	-1.4%	2001-02	40,883,326	5.2%		
2002-03	6,783,458,295	3.4%	2002-03	42,304,059	3.5%		

#### GENERAL FUND TOTAL TAX RECEIPTS

#### **Distilled Spirits**

Fiscal Year	Receipts	Percent Change	Fiscal Year	Receipts	Percent Change
1993-94	\$ 4,459,648,594 *	3.0%	1993-94	\$ 19,960,515	0.2%
1994-95	4,931,201,083	10.6%	1994-95	19,897,599	-0.3%
1995-96	5,095,157,184	3.3%	1995-96	20,493,441	3.0%
1996-97	5,408,832,505	6.2%	1996-97	20,548,503	0.3%
1997-98	5,722,452,608	5.8%	1997-98	20,979,849	2.1%
1998-99	5,917,216,645	3.4%	1998-99	21,432,736	2.2%
1999-00	6,200,475,504	4.8%	1999-00	22,349,780	4.3%
2000-01	6,377,917,219	2.9%	2000-01	23,077,057	3.3%
2001-02	6,292,004,457	-1.3%	2001-02	23,477,073	1.7%
2002-03	6,543,157,657	4.0%	2002-03	24,854,482	5.9%

<sup>\*</sup>Adjusted for small math error.

Fiscal		Percent	Fiscal		Percent
Year	Receipts	Change	Year	Receipts	Change
1993-94	\$ 4,492,841	0.9%	1993-94	\$179,844,327	-0.2%
1994-95	4,847,726 *	7.9%	1994-95	179,116,944	-0.4%
1995-96	5,610,308	15.7%	1995-96	166,101,045	-7.3%
1996-97	6,085,828	8.5%	1996-97	163,545,844	-1.5%
1997-98	6,551,316	7.6%	1997-98	163,731,038	0.1%
1998-99	7,049,136	7.6%	1998-99	154,476,772	-5.7%
1999-00	7,672,648	8.8%	1999-00	145,139,909	-6.0%
2000-01	7,846,391	2.3%	2000-01	141,553,087	-2.5%
2001-02	8,183,587	4.3%	2001-02	160,160,116	13.1%
2002-03	8,698,754	6.3%	2002-03	141,664,981	-11.5%

<sup>\*</sup>Adjusted for small math error

#### **CIGARETTE TAX\***

#### **CORPORATION INCOME TAX**

Fiscal		Percent	Fiscal		Percent
Year	Receipts	Change	Year	Receipts	Change
1993-94	\$ 14,285,746	2.1%	1993-94	\$269,067,231	5.6%
1994-95	15,126,270	5.9%	1994-95	340,912,408	26.7%
1995-96	15,680,704	3.7%	1995-96	284,732,573	-16.5%
1996-97	16,044,967	2.3%	1996-97	292,753,126	2.8%
1997-98	15,130,443	-5.7%	1997-98	333,666,393	14.0%
1998-99	14,673,839	-3.0%	1998-99	312,066,675	-6.5%
1999-00	14,184,888	-3.3%	1999-00	306,442,050	-1.8%
2000-01	14,007,582	-1.2%	2000-01	289,931,017	-5.4%
2001-02	13,943,208	-0.5%	2001-02	207,353,777	-28.5%
2002-03	16,367,947	17.4%	2002-03	278,035,794	34.1%

<sup>\*</sup>The cigarette tax is levied at the rate of 3 cents per pack. These totals reflect the 2.5 cents per pack that are deposited into the General Fund. The remaining 0.5 cent per pack is dedicated to tobacco research and is deposited in the Tobacco Research Trust Fund.

#### **CORPORATION LICENSE TAX**

#### INHERITANCE AND ESTATE TAX

<b>Fiscal</b>		Percent	Fiscal		Percent
Year	Receipts	Change	Year	Receipts	Change
1993-94	\$ 82,031,324 *	-5.8%	1993-94	\$ 76,135,351	7.3%
1994-95	97,449,950 *	18.8%	1994-95	79,511,634	4.4%
1995-96	90,515,183 **	-7.1%	1995-96	81,441,427 *	2.4%
1996-97	107,498,746	18.8%	1996-97	95,287,282	17.0%
1997-98	112,763,161	4.9%	1997-98	105,538,130	10.8%
1998-99	125,912,523	11.7%	1998-99	81,483,083	-22.8%
1999-00	139,127,819	10.5%	1999-00	74,489,981	-8.6%
2000-01	147,515,402	6.0%	2000-01	83,461,499	12.0%
2001-02	117,500,770	-20.3%	2001-02	83,359,872	-0.1%
2002-03	152,595,257	29.9%	2002-03	95,864,480	15.0%

#### INDIVIDUAL INCOME TAX

#### **INSURANCE PREMIUMS TAX Foreign Life Insurance Companies**

<b>Fiscal</b>		Percent	Fiscal		Percent
Year	Receipts	Change	Year	Receipts	Change
1993-94	\$1,729,182,293	-0.2%	1993-94	\$ 38,057,960	11.1%
1994-95	1,964,843,490	13.6%	1994-95	33,966,941	-10.7%
1995-96	2,074,572,167	5.6%	1995-96	36,165,049	6.5%
1996-97	2,205,022,964	6.3%	1996-97	33,086,032	-8.5%
1997-98	2,418,144,438	9.7%	1997-98	35,116,933	6.1%
1998-99	2,532,005,348	4.7%	1998-99	33,085,292	-5.8%
1999-00	2,701,613,908	6.7%	1999-00	35,909,807	8.5%
2000-01	2,778,541,444	2.8%	2000-01	34,775,487	-3.2%
2001-02	2,702,510,022	-2.7%	2001-02	36,058,437	3.7%
2002-03	2,746,386,944	1.6%	2002-03	36,904,902	2.3%

<sup>\*</sup> Adjusted for small math error.
\*\* Corrected for posting error.

<sup>\*</sup>Phase-in of Class A beneficiary exemption began July 1, 1995.

#### **Insurance Companies Other than Life**

#### MINERALS AND NATURAL GAS TAX

Fiscal Year 1993-94 1994-95 1995-96 1996-97 1997-98 1998-99 1999-00 2000-01 2001-02	\$ Receipts 42,720,970 45,515,163 48,687,419 50,318,931 52,600,230 54,431,503 57,000,964 59,118,323 65,899,201	Percent Change 5.1% 6.5% 7.0% 3.4% 4.5% 3.5% 4.7% 3.7% 11.5%	Fiscal Year 1993-94 1994-95 1995-96 1996-97 1997-98 1998-99 1999-00 2000-01 2001-02	\$ Receipts 16,718,727 14,783,614 17,378,785 20,051,609 20,192,086 18,954,883 22,369,419 30,030,552 24,656,955	Percent Change 8.1% -11.6% 17.6% 15.4% 0.7% -6.1% 18.0% 34.2% -17.9%
2001-02 2002-03	65,899,201 74,529,362	11.5% 13.1%	2001-02 2002-03	24,656,955 27,294,398	-17.9% 10.7%

#### **LOTTERY RECEIPTS**

#### OIL PRODUCTION TAX

Fiscal		Percent	Fiscal		Percent
Year	Receipts	Change	Year	Receipts	Change
1993-94	\$ 114,000,000	14.0%	1993-94	\$ 2,697,560	-38.9%
1994-95	136,000,000	19.3%	1994-95	2,784,562	3.2%
1995-96	147,000,000	8.1%	1995-96	2,644,656	-5.0%
1996-97	151,000,000	2.7%	1996-97	3,044,497	15.1%
1997-98	153,000,000	1.3%	1997-98	2,135,211	-29.9%
1998-99	153,800,000	0.5%	1998-99	1,344,942	-37.0%
1999-00	156,300,000	1.6%	1999-00	2,967,395	120.6%
2000-01	157,030,000	0.5%	2000-01	3,358,036	13.2%
2001-02	169,000,000	7.6%	2001-02	2,590,722	-22.9%
2002-03	171,000,000	1.2%	2002-03	3 116 954	20.3%

#### **PARI-MUTUEL TAX**

#### **Property Taxes - Real Estate**

Fiscal		Percent	Fiscal		Percent
Year	Receipts	Change	Year	Receipts	Change
1993-94	\$ 6,134,317	-1.8%	1993-94	\$132,125,477	4.6%
1994-95	7,256,986	18.3%	1994-95	133,200,108	0.8%
1995-96	7,148,951	-1.5%	1995-96	142,728,406	7.2%
1996-97	5,911,958	-17.3%	1996-97	170,063,059 *	19.2%
1997-98	4,845,921	-18.0%	1997-98	154,245,453	-9.3%
1998-99	7,179,163	48.1%	1998-99	161,723,137	4.8%
1999-00	6,645,098	-7.4%	1999-00	167,326,472	3.5%
2000-01	6,182,083	-7.0%	2000-01	171,524,695	2.5%
2001-02	5,179,952	-16.2%	2001-02	179,678,050	4.8%
2002-03	5,953,247	14.9%	2002-03	186,000,177	3.5%

<sup>\*</sup> Some tangible property tax receipts were erroneously credited to real property receipts accounts.

#### **TOTAL PROPERTY TAXES**

#### **Property Taxes - Tangible**

Fiscal Year	Receipts	Percent Change	Fiscal Year	Receipts	Percent Change
1993-94	\$ 370,199,709	4.4%	1993-94	\$ 104,501,822	10.8%
1994-95	395,324,665	6.8%	1994-95	114,122,717	9.2%
1995-96	409,176,706	3.5%	1995-96	137,812,773	20.8%
1996-97	414,858,124	1.4%	1996-97	124,637,468	* -9.6%
1997-98	362,792,501	-12.6%	1997-98	125,753,465	0.9%
1998-99	370,404,549	2.1%	1998-99	125,564,658	-0.2%
1999-00	387,257,800	4.5%	1999-00	130,960,896	4.3%
2000-01	407,494,858	5.2%	2000-01	140,466,295	7.3%
2001-02	433,029,587	6.3%	2001-02	151,308,795	7.7%
2002-03	434,768,249	0.4%	2002-03	149,426,286	-1.2%

<sup>\*</sup> Some tangible property tax receipts were erroneously credited to real property receipts accounts.

#### **Property Taxes - Intangible**

#### **BANK FRANCHISE TAX\***

Fiscal		Percent	<b>Fiscal</b>		Percent	
Year	Receipts	Change	Year	Receipts	Change	
1993-94	\$ 77,393,521	-0.5%	1996-97	\$ 40,878,664		
1994-95	83,479,482	7.9%	1997-98	35,059,801	-14.2%	
1995-96	66,489,089	-20.4%	1998-99	47,059,959	34.2%	
1996-97	46,631,437 *	-29.9%	1999-00	53,061,789	12.8%	
1997-98	21,129,328 *	-54.7%	2000-01	49,610,220	-6.5%	
1998-99	18,103,920	-14.3%	2001-02	50,549.168	1.9%	
1999-00	22,721,743	25.5%	2002-03	53,747,906	6.3%	
2000-01	22,551,153	-0.8%				
2001-02	23,113,567	2.5%	*Kentucky's	s bank franchise tax	was instituted	in
2002-03	25,883,197	12.0%	July 1996.			

<sup>\*</sup>Shares of stock were exempted from property tax.

#### SALES AND USE TAX

#### ROAD FUND TOTAL RECEIPTS

Fiscal		Percent	Fiscal		Percent
Year	Receipts	Change	Year	Receipts	Change
1993-94	\$ 1,560,085,519	6.7%	1993-94	\$ 862,826,425	5.2%
1994-95	1,680,520,815	7.7%	1994-95	900,619,387	4.4%
1995-96	1,783,881,316	6.2%	1995-96	939,910,490	4.4%
1996-97	1,882,681,995	5.5%	1996-97	960,183,780	2.2%
1997-98	1,981,297,580	5.2%	1997-98	1,011,789,675	5.4%
1998-99	2,085,899,677	5.3%	1998-99	1,056,596,153	4.4%
1999-00	2,171,397,969	4.1%	1999-00	1,090,777,822	3.2%
2000-01	2,248,471,100	3.5%	2000-01	1,064,181,565	-2.4%
2001-02	2,299,990,621	2.3%	2001-02	1,119,005,317	5.2%
2002-03	2,364,182,478	2.8%	2002-03	1,123,103,133	0.4%

#### ROAD FUND TOTAL TAX RECEIPTS

#### MOTOR FUELS TAXES Motor Fuels Normal

<b>Fiscal</b>		Percent	Fiscal		Percent
Year	Receipts	Change	Year	Receipts	Change
1993-94	\$ 836,526,817	5.5%	1993-94	\$ 358,435,307	1.4%
1994-95	868,711,393	3.8%	1994-95	373,316,977	4.2%
1995-96	899,036,284	3.5%	1995-96	378,142,941	1.3%
1996-97	919,796,955	2.3%	1996-97	390,688,336	3.3%
1997-98	961,522,616	4.5%	1997-98	396,123,781	1.4%
1998-99	1,013,091,830	5.4%	1998-99	427,848,100	8.0%
1999-00	1,055,295,426	4.2%	1999-00	423,876,351	-0.9%
2000-01	1,013,143,743	-4.0%	2000-01	408,801,115	-3.6%
2001-02	1,052,848,911 *	3.9%	2001-02	429,812,296	5.1%
2002-03	1,059,296,184	0.6%	2002-03	438,564,438	2.0%

#### MOTOR VEHICLE USAGE TAX

#### **Motor Fuels Normal Use and Surtax**

<b>Fiscal</b>		Percent	Fiscal		Percent
Year	Receipts	Change	Year	Receipts	Change
1993-94	\$ 278,157,347	19.1%	1993-94	\$ 21,399,126	3.9%
1994-95	283,820,829	2.0%	1994-95	23,052,951	7.7%
1995-96	298,585,859	5.2%	1995-96	22,554,473	-2.2%
1996-97	304,868,491	2.1%	1996-97	15,316,702	-32.1%
1997-98	325,308,554	6.7%	1997-98	17,473,744	14.1%
1998-99	331,187,817	1.8%	1998-99	16,853,163	-3.6%
1999-00	359,437,723	8.5%	1999-00	15,905,613	-5.6%
2000-01	345,120,799	-4.0%	2000-01	15,492,738	-2.6%
2001-02	381,398,176	10.5%	2001-02	14,124,035	-8.8%
2002-03	388 959 153	2.0%	2002-03	14 969 884	6.0%

#### MOTOR VEHICLE OPERATOR'S LICENSE

#### MOTOR VEHICLE RENTAL USAGE TAX

<b>Fiscal</b>		Percent	Fiscal		Percent
Year	Receipts	Change	Year	Receipts	Change
1993-94	\$ 5,358,710	6.7%	1993-94	\$ 17,055,319	40.7%
1994-95	5,170,423	-3.5%	1994-95	22,966,441	34.7%
1995-96	5,110,387	-1.2%	1995-96	29,054,964	26.5%
1996-97	5,355,648	4.8%	1996-97	36,593,748	25.9%
1997-98	5,241,595	-2.1%	1997-98	41,450,720	13.3%
1998-99	5,400,685	3.0%	1998-99	44,465,916	7.3%
1999-00	5,689,329	5.3%	1999-00	49,957,851	12.4%
2000-01	5,592,769	-1.7%	2000-01	51,619,167	3.3%
2001-02	5,564,009	-0.5%	2001-02	47,840,871	-7.3%
2002-03	5,610,829	0.8%	2002-03	43,877,657	-8.3%

### MOTOR VEHICLE REGISTRATIONS Passenger Car Registration

Fiscal		Percent
Year	Receipts	Change
1993-94	\$23,473,690	1.7%
1994-95	23,398,303	-0.3%
1995-96	23,389,132	0.0%
1996-97	23,276,395	-0.5%
1997-98	23,604,679	1.4%
1998-99	23,356,526	-1.1%
1999-00	23,485,625	0.6%
2000-01	23,162,962	-1.4%
2001-02	25,355,086	9.5%
2002-03	25,793,836	1.7%

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